# APPENDIX C Lefthand Watershed Fact Sheet

### Lefthand Watershed

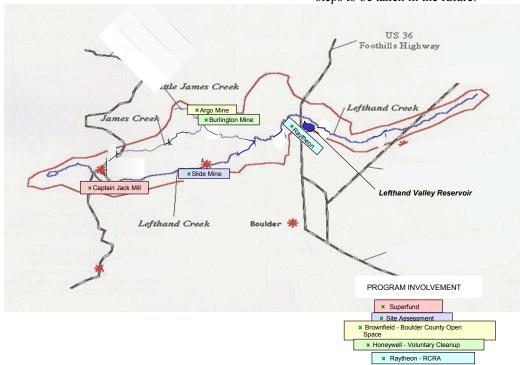


### FEBRUARY 2004 INFORMATION SHEET

### **INTRODUCTION**

The Environmental Protection Agency (EPA) and the Colorado Department of Public Health and Environment (CDPHE) will examine opportunities to coordinate environmental and water quality assessments and funding efforts within the Lefthand Watershed. This effort will promote a holistic approach to assure coordination in establishing and achieving environmental cleanup and water quality goals. A key component of this effort will be assuring participation between local, state and federal stakeholders.

The Lefthand Watershed Oversight Group (LWOG) and the James Creek Watershed Initiative (JCWI) are local stakeholder groups working collaboratively with local, state and federal agencies to address environmental contamination in the Lefthand Watershed. The group currently focuses on the impacts on human health and the environment from historic mining practices. Metals such as cadmium, copper, lead and zinc are the primary contaminants of concern. This fact sheet will highlight the progress made to date, current activities, and steps to be taken in the future.



#### **BACKGROUND**

The Environmental Protection Agency (EPA), Colorado Department of Public Health and Environment (CDPHE) and the Boulder County Health Department (BCHD) have worked on environmental issues in the Lefthand Watershed since the mid-1980s. Lefthand Creek is the primary source of drinking water for more than 14,000 customers of the Left Hand Water District. In the 1980s, EPA site assessment activities revealed significant impacts to fisheries and wetlands from the discharges of metalcontaminated water from the major abandoned mining and milling areas of Captain Jack, adjacent to the town of Ward, the Slide Mine and Mill, downhill from Gold Hill and adjacent to Rowena and from the numerous abandoned mines and mills of the Jamestown area, on Little James and James Creeks, tributaries to Lefthand Creek. In May 2002, the Boulder County Board of Health sent a letter to the Colorado Governor's office requesting support for the National Priorities List (NPL) or Superfund designation for the Captain Jack Mill site. The site was listed on the NPL on September 29, 2003.

EPA has also been involved in the Lefthand Watershed at the Raytheon site, located about two miles north of Boulder. The Raytheon site originally consisted of 1,500 acres on the east and west sides of the North Foothills Highway. Raytheon sold 1,237 acres on the east side of the highway to Boulder County Open Space. In 1996, 225 acres were sold to the Santa Fe Land company, leaving Raytheon with approximately 38 acres. Sampling in 1991 and 1995 identified low residual concentrations of Volatile Organic Compounds (VOCs) in ground water migrating across the highway to open space property. The contaminated ground water emerges as surface water in seeps that flow into a wetland area in a drainage approximately a half mile uphill of Lefthand Reservoir, a drinking water supply for

the Left Hand Water District. No contaminants from this seepage water have been detected in the reservoir.

The James Creek Watershed is listed on the State of Colorado's 1998 303(d) list as impaired for not supporting the aquatic life use classification. The stream exceeds water quality standards for cadmium, copper, manganese, lead and zinc. The segment is designated as high priority for Total Maximum Daily Load (TMDL) development.

### THE WATERSHED PROCESS

In 2001 the BCHD facilitated the formation of a Lefthand Watershed Task Force to assess existing environmental and health data related to the watershed, determine if a cleanup action was necessary and, if necessary, evaluate cleanup options and recommend the preferred option to the Boulder County Board of Health. In March 2002, the findings and recommendations of the Lefthand Watershed Task Force included: establishment of a Watershed Oversight Group (WOG) to serve as a hub for communication and information dissemination, further assessment and remediation using the Superfund NPL for the Captain Jack Mill site, and further assessment using alternatives to Superfund throughout the remainder of the Lefthand Watershed and the communities of Rowena and Jamestown

The 2002 Lefthand Watershed Task Force report indicated that, despite numerous individual studies of the watershed, no comprehensive, systematic study of the entire watershed can conclusively establish:

- the exact extent of potential risks to aquatic life and human health;
- the potential effects on water quality of a catastrophic storm or similar event;
- the source(s) of contaminants;
- the appropriate remediation strategies to remove contaminants.

This community-based watershed effort will utilize watershed-based data and solutions to make site-specific cleanup decisions. EPA and CDPHE are working together to provide cross-programmatic assessment and remediation alternatives to the community. The **goal** of the watershed-based assessment is to provide a transparent and efficient cleanup in partnership with the community and local, state and federal agencies.

#### **PROGRAM OVERVIEWS:**

### **TMDL Study**

When pollutants affect the use of a water body, a study is required by the Clean Water Act to restore the impaired water and remove pollutants. This study is called the Total Maximum Daily Load or TMDL. This establishes the amount of a pollutant allowed in the water. Colorado is required by law to identify polluted waters on the 303(d) list and to develop TMDLs to help address the problem.

The TMDL study follows a process that includes the following steps:

- 1. Identify the sources and causes of the pollutant responsible for impairment.
- 2. Quantify the TMDL by determining the total amount of pollutant that can be allowed into the water and what reductions are needed to achieve that amount. Surrogate endpoints may be established that are directly linked to the impairment to assure the achievement of the water quality goals.
- 3. Identify the water quality goal. How much does the pollutant need to be reduced to meet water quality objectives?
- 4. Identify and implement the practices needed to reduce excess pollutants.
- 5. Monitor the water bodies to assure the goals are being met and modify the plan if needed.

A TMDL has been completed for Little James Creek for cadmium and zinc. In addition, the James Watershed is currently listed for copper and lead on the Colorado State draft 2004 303(d) List.

### 319 Nonpoint Source Program

Congress enacted Section 319 of the Clean Water Act in 1987, establishing a national program to control nonpoint sources of water pollution. Nonpoint source pollution is caused by rainfall or snowmelt moving over and through the ground and carrying natural and human-made pollutants into lakes, rivers, streams, wetlands, estuaries, other coastal waters and ground water. Atmospheric deposition and hydrologic modification are also sources of nonpoint pollution.

Since 1999, Section 319(h) funds have been awarded to state nonpoint source agencies in two categories; incremental funds and base funds. *Incremental funds* are designated for the development and implementation of watershed-based plans and Total Maximum Daily Loads (TMDLs) for impaired waters. **Base funds**, are used to provide staffing and support to manage and implement the state Nonpoint Source Management Program. Base funds help support projects that identify and address nonpoint source problems and threats, and also can be used for water-body specific, statewide or regional projects. A portion of these base funds (up to 20 percent) may be used for conducting assessments, developing TMDLs, and creating programs to solve nonpoint source problems.

### **Site Assessment Program**

The Superfund Site Assessment Program conducts screening investigations to evaluate potential threats to human health and the environment associated with a specific site. The program also helps identify and prioritize the sites that should be on the Superfund National Priorities List

(NPL). The following site assessment steps are taken prior to NPL listing or any remedial activities.

- 1. Site Identification or Discovery Sites may be discovered by anyone, but are frequently identified by concerned citizens, who call the local or state health department or EPA to report a release (or the threat of a release) of a hazardous substance to the environment. Once identified, EPA enters the site into a database that tracks all sites investigated using funds from Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or Superfund.
- 2. Complete a Preliminary Assessment (PA) The PA is a limited-scope investigation where available information about a site and its surrounding area is compiled. The PA is designed to distinguish between sites that pose little or no threat to human health and the environment and sites that may pose a threat and require further investigation. If the PA results in a recommendation for further investigation, a Site Inspection is performed.
- 3. Conduct a Site Inspection (SI) The SI involves collecting on-site characterization samples and off-site ground water, surface water/sediments, soil, air or fish tissue samples to determine if substances at the site are being released to the environment and assess if they have reached nearby targets. The SI can be conducted in one stage or two. The first stage, or focused SI (FSI), tests hypotheses developed during the PA and can yield information sufficient to prepare a Hazard Ranking System (HRS) scoring package. If further information is necessary to document an HRS score, an expanded SI (ESI) is conducted. To save time and money, the PA and SI phases may be completed at once.
- 4. Calculate a preliminary HRS score using data collected during the PA and SI Sites with a preliminary HRS score of 28.50 or greater are eligible for listing on the NPL

and require the formal preparation of an HRS scoring package.

### **Superfund Program**

The Superfund program was created in 1980 to address the worst abandoned hazardous waste sites in the United States. In the Rocky Mountain states, many Superfund sites are associated with past mining activities. Once a potential site has been discovered and reported to the state and/or EPA, it becomes eligible for investigation. At this point, the Site Assessment program (explained above) investigates the site and uses the HRS to determine if the site can be on the National Priorities List (NPL), a list of sites needing the most attention. A site on the NPL becomes eligible for cleanup funding from Superfund. Wherever possible, EPA attempts to find those responsible for causing the problem and makes them pay for the cleanup. In cases where viable responsible parties cannot be found, Superfund is used to clean up the site.

If a site is scored on the NPL, a remedial investigation (study) must take place to define the extent of the problem. Next, a feasibility study picks the best way to clean up the site and EPA issues a Record of Decision (ROD) outlining the official clean up plan. Once the ROD is issued, a remedial design (a detailed engineering plan for the cleanup) and remedial action (clean up) take place. Depending on the size of the problem and the availability of funding, this process can take several years.

### **Brownfields**

On January 11, 2002, The Small Business Liability Relief and Brownfields Revitalization Act was signed, expanding EPA's Brownfields program. This law defines a brownfields site as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." The law further defines the term "brownfields"

site" to include sites contaminated by controlled substances, petroleum or petroleum products, or mining wastes.

Properties and/or facilities that are on the NPL, subject to legal proceedings and determinations under CERCLA, or owned by the federal government are not covered under the Brownfields program.

### Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act (enacted in 1976) governs the management of solid and hazardous waste and underground storage tanks. RCRA programs are designed to address active facilities that manage, use or dispose of hazardous wastes. These programs include taking clean up and containment actions where threats to human health and the environment have been identified.

### USFS Abandoned Mine Lands Program

The Department of Agriculture Forest Service has established an Abandoned Mine Lands (AML) Program to clean up and reclaim abandoned mines sites on National Forest System (NFS) Lands. The Forest Service has CERCLA authority for investigations and remediation of non-emergency hazardous waste sites on lands they manage. The Forest Service AML program conducts CERCLA removal and remedial actions following the National Contingency Plan. Once a site is identified, a Preliminary Assessment (PA) and Site Investigation (SI) are conducted as described above.

In support of the National Forest Plan revisions, which occur every five years, the U.S. Geological Survey and U.S. Forest Service coordinate on an assessment of geological resources on NFS lands. Beginning in 2004, the Geological Survey will be conducting the Central Colorado

Assessment Project, which will include the Arapaho and Roosevelt National Forests. This current assessment will include biological and water chemistry components. The Forest Service has proposed the Lefthand Watershed as its priority watershed for the USGS assessment of the Roosevelt National Forest.

### **SURFACE WATER QUALITY ASSESSMENT – Lefthand Watershed**

### **Site Assessment Program**

### Left Hand Watershed PA/SI Activities

The following subsections summarize the Site Assessment work done at the Captain Jack Mine and Mill, the Golden Age Mine, and the Slide Mine/Corning Tunnel.

### Captain Jack Mine and Mill

Around 1986, and before EPA Site Assessment Program involvement, the Colorado Mined Land Reclamation Division (CMLRD) and the CDPHE investigated the Captain Jack. In 1988, the EPA PA reported the potential for significant impacts to the local environment. In 1992, EPA conducted an SI, in which elevated concentrations of several organic compounds, pesticide/PCB compounds, radionuclides and metals were reported. Arsenic, barium and lead were detected in Left Hand Creek downgradient of the mine. In 1992, there was also an illegal cyanide discharge that released cadmium, copper, lead and zinc.

In 1997, the EPA conducted another SI. Analyses showed elevated levels of arsenic, cadmium, chromium, copper, lead, manganese, mercury and zinc at the Big Five tailings pile and settling pond. Surface water and sediment samples collected along Left Hand Creek and its tributaries indicated elevated concentrations of site-related metals. In addition, ground water samples collected indicated elevated concentrations of cadmium, calcium, copper, lead, manganese and zinc.

EPA identified downstream targets including a fishery, wetlands, and threatened and endangered species habitat within Left Hand Canyon. All of the data from the investigations noted above were used to support HRS documentation and placement on the NPL. Currently, remedial dollars are being made available to fund further characterization, risk assessment, and cleanup of the Captain Jack site.

### Golden Age Mine

This mine has also been investigated under the Site Assessment program. In 1994 a PA was completed, which recommended that a SI be conducted. In 1997, EPA evaluated the Jamestown District, in which the Golden Age Mine is located. The 1997 FSI and 1998 ESI showed that mining sources in the Jamestown District have impacted wetlands and a fishery. Since that time, EPA Superfund programs have been coordinating with a local community-based effort to address mining impacts in this part of the watershed.

### Slide Mine/Corning Tunnel

The Slide Mine/Corning Tunnel site consists of an abandoned mill building, a large tailings pile and a collapsed adit/seep area comprising about 12 acres on a hill terrace approximately 1,000 feet above Left Hand Creek on the south side of the creek. The site also includes the abandoned Corning Tunnel and a collapsed mill structure with associated foundations and debris. At certain locations on the hill, slope water emerges and discharges to the unnamed drainage that joins Left Hand Creek.

Sampling efforts performed in and around the site consist of incidental sampling events prompted by reports of stream discoloration by the citizens of Rowena. These reports as well as past CDPHE observations indicate that the Slide Mine runoff discharges to Left Hand Creek during periods of snowmelt and high precipitation. During a May 2001 tour of the Left Hand Creek drainage, personnel from CDPHE, Boulder County Health, and representatives of news media and local

elected officials observed runoff from the Slide Mine drainage entering Left Hand Creek. The discharge discolored the creek from the Probable Point of Entry (PPE) at the base of the Slide Mine Drainage to a location approximately 0.25 miles below the town of Rowena. At the time of the observation, the creek above the PPE for the Slide Mine was clear and the source of the discharge was visually evident.

In March 2002, reports to the Boulder County Health Department indicated that the Slide Mine was again discoloring the stream during a runoff event. Rowena residents characterized the runoff as a milky-white substance entering Left Hand Creek from the Slide Mine area and discoloring the creek for an undetermined distance below town. EPA Emergency Response Branch (ERB) personnel responded and samples collected from the stream during this run-off event indicated the presence of arsenic, cadmium, copper, iron, lead, mercury, silver and zinc.

In November 2002 and February 2003, CDPHE Site Assessment staff conducted a combined PA/SI. Total metals analysis of the tailings samples indicated the presence of arsenic, cadmium, copper, mercury, lead, silver and zinc. Comparisons of metals in sediment samples collected downstream of the site to those levels reported in the upgradient sample indicate releases of site-related contaminants. The elevated levels of metals are documented in sediments as far as 0.3 miles downstream of the PPE.

Surface water pathway targets include the fishery and riparian wetlands that are present along Left Hand Creek downstream of the site as well as the Left Hand Water District's Haldi intake, which serves 6,318 connections and is situated approximately 8.2 miles downstream of the site. EPA is working with state and local partners to develop a strategy to address the Slide Mine site.

### 319 Nonpoint Source Assessment

The Lefthand Watershed Oversight Group (LWOG) received a \$25,000 grant from CDPHE Nonpoint Source program for the development of a Watershed Plan for the upper Lefthand Watershed that can be used to plan corrective actions. The plan will formalize the organizational structure of numerous stakeholders in the watershed and provide a framework for project implementations. The LWOG will utilize existing and future data compiled during the project from the EPA, CDPHE, U.S. Geological Survey, James Creek Watershed Initiative, University of Colorado, Lefthand Watershed Task Force, and other available sources. Areas that need additional characterization or evaluation will be identified and additional data will be gathered. Once developed, this plan will be used to solicit additional funding from the Nonpoint Source program and other funding sources for development of a TMDL, including assessment work and implementation of the watershed-based plan.

### **Brownfields Assessment**

In FY 2003, Boulder County Open Space submitted a proposal to receive a grant of \$200K to conduct further assessment (sampling) of the Argo Mine, which had been acquired by the County.

Unfortunately, they were not eligible to receive the grant due to liability prohibitions associated with EPA brownfields grants. As a result, Boulder County Open Space met with the State to seek direct assessment support through the Targeted Brownfields Assessment program.

The State has agreed to support Boulder County by assessing the Argo Mine. To date, a sampling plan has not been prepared, however, CDPHE does not anticipate the sampling to be very extensive. The approximate cost of the assessment will be between \$5,000 - \$10,000 and will include analyzing for metals in the surface water of

Little James Creek and sampling of waste rock. The State anticipates that the sampling will occur sometime during the spring of 2004

### **Superfund Remedial Investigation/Feasibility Study**

The Captain Jack Mill site has been included on the National Priorities List. The first step of this process is the Remedial Investigation/ Feasibility study (RI/FS). The RI will collect data to characterize site conditions, determine the nature of the waste, and assess the risk to human health and environment. The FS is the mechanism for the development, screening and detailed evaluation of alternative remedial actions. The RI and FS are conducted concurrently.

### **Voluntary Cleanup – Burlington Mine**

The primary objectives of the CDPHE lead Voluntary Cleanup Plan (VCUP) for the Burlington Mine Site are to fill the subsidence features, cover mine wastes, manage surface water, realign Balarat Gulch, and revegetate the entire disturbed area.

### Resource Conservation and Recovery Act activities at Raytheon

### **RCRA**

The RCRA Facility Investigation (RFI) completed in October 2002 focused on three areas at the Raytheon property in the Left Hand Creek Watershed: The Clean Room Annex/former impoundment area, the Unnamed Drainage/Seep Area, and the Target/Missile Fueling Area (TMFA).

The area around the Clean Room Annex/former impoundment area show elevated concentrations of acetone, Freon 113, TCE and its decomposition products exist in fractured bedrock and groundwater. A dissolved-phase plume of VOC's from the Clean Room/Impoundment area follows the valley formed by the Unnamed Drainage and emerges at the ground surface off-site area of natural ground-water discharge. The RFI included a series of pumping tests conducted in the Unnamed Drainage to assess hydraulic characteristics within the drainage and identify and evaluate possible boundary effects. A barrier boundary, possibly a fault, was identified. Pilot scale hydraulic recovery and soil vapor extraction tests were conducted on three angle borings; the results indicate that both groundwater and soil vapor extraction are effective. In addition, results of the pumping tests show that the groundwater in the Fort Havs and overlying Niobrara Shale is not strongly interconnected.

Contaminant concentrations in the TMFA are several orders of magnitude less than those found in the Clean Room Annex/ Impoundment Area. The resultant contaminant plume in the shallow groundwater at the TMFA is confined within the former Facility boundaries.

Raytheon has begun a Phase II RFI to make a final determination of nature and extent of groundwater contamination by drilling five deep sampling wells and additional shallow wells to understand the complex site geology. A parallel, Corrective Measures Study is testing five techniques to remediate chlorinated hydrocarbons in groundwater.

The Interim Remedial Measure started in 1997 provided continuous UV/hydrogen peroxide, carbon polishing, and air stripping of contaminated groundwater. The contaminated groundwater is pumped from eight wells located near the Clean Room Annex/Impoundment area. To date, 2.5 million gallons of groundwater have been treated.

When the Phase II RFI and the Corrective Measure Study are completed a Corrective Measures Workplan will be prepared. Corrective Measures will continue indefinitely, until acceptable water quality standards are met.

### **EPA Consolidated Funding Process**

A proposal submitted from LWOG for 2004 Regional Geographic Initiative (RGI) funding requests \$20,000 to quantify, over varying flow conditions, the metal contributions of potential sources of significant water quality impairment.

### **One Cleanup Pilot Program**

The work to be performed has not been finalized. It is anticipated that a guidance manual will be developed documenting the integration of multiple programs and Superfund in the assessment and cleanup of Lefthand Watershed.

### **USFS Abandoned Mine Lands**

In the mid-1990s, the Forest Service contracted with the Colorado Geological Survey to conduct an inventory of abandoned mine sites on the Arapaho and Roosevelt National Forests. The Forest Service has been using this inventory to prioritize sites for assessment and evaluation. The Forest Service will be working on several sites in the Lefthand Creek Watershed in 2004.

### Fair Day Mine

A PA/SI has been completed for the Fair Day Mine and will be available for public review and input in the near future. The Forest Service intends to conduct a removal action at the Fair Day in late summer 2004.

### Golden Age

EPA has conducted a PA and SI on the Golden Age Mine and determined that a portion of the Mine workings is located on NFS lands. The Forest Service will be developing an Engineering Evaluation/Cost Analysis (EECA) in 2004, which may include some additional site investigation work.

### **Loader Tailings**

The Loader Tailings are located along Lefthand Creek downstream of the Captain Jack Mine. These tailings may have resulted from operations at the Loader Smelter located a short distance upstream. The Forest Service will be conducting a Site Inspection of the Loader Tailings in 2004.

### Bueno Mine Tailings

The Bueno Mine is located west of Jamestown between James Creek and Little James Creek. The mine site itself is located on private property; however, tailings were slurried from the mine site to the end of the ridge and onto NFS lands. The Forest Service will be conducting a Site Inspection of the Bueno Tailings in 2004.

The Arapaho and Roosevelt NFs will be submitting a proposal to the U.S. Department of Agriculture for funding to conduct Removal actions at these and other sites in the Lefthand Creek Watershed. The Department is requesting watershed-based proposals and the Lefthand Watershed has been targeted as a priority watershed for the Forest's AML program.

## FUNDING OPPORTUNITIES Brownfields

#### **Assessment Grants**

Assessment grants provide funding for a grant recipient to inventory, characterize, assess and conduct planning and community involvement related to brownfields sites. An eligible entity may apply for up to \$200,000 to assess a site contaminated by hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum) and up to \$200,000 to address a site contaminated by petroleum.

### Revolving Loan Fund Grants

Revolving Loan Fund (RLF) grants provide funding for a grant recipient to capitalize a revolving loan fund and to provide subgrants

to carry out cleanup activities at brownfields sites. An eligible entity may apply for up to \$1 million for and initial RLF grant. Proposals may be submitted by "coalitions," or groups of eligible entities, to pool their revolving loan capitalization grant funds. A coalition is a group of two or more eligible entities, which submits one grant application under the name of one of the coalition participants. Coalitions of eligible entities may apply together under one recipient for up to \$1 million per eligible entity. These funds may be used to address sites contaminated by petroleum and hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum). An RLF award requires a 20 percent cost share.

### Cleanup Grants

Cleanup grants provide funding for a grant recipient to carry out cleanup activities at brownfields sites. An eligible entity may apply for up to \$200,000 per site. Due to budget limitations, an entity can only apply for funding cleanup activities at no more than five sites. These funds may be used to address sites contaminated by petroleum and hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum). Cleanup grants require a 20 percent cost share. In order to receive a cleanup grant, the applicant must own the property for which they are applying by the time the grant is awarded.

#### Job Training Grants

The Brownfields Job Training Grants bring together community groups, job training organizations, educators, labor groups, investors, lenders, developers and other affected parties to address the issue of providing environmental employment and training for residents in communities impacted by brownfields. An eligible entity may apply for up to \$200,000 for the development of a job training program.

### **Other Brownfields Assistance**

### **Targeted Brownfields Assessments**

**EPA's Targeted Brownfields Assessment** (TBA) program is designed to help communities —especially those without EPA Brownfields Assessment grants minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides technical assistance for environmental assessments at brownfields sites throughout the country. Under the Small Business Liability Relief and Brownfields Revitalization Act, EPA's TBA assistance is available through two sources: directly from EPA through EPA Regional Brownfields offices under Subtitle A of the law, and from state or tribal voluntary response program offices receiving funding under Subtitle C of the law. A TBA may encompass one or more of the following activities: 1) a screening or "all appropriate inquiry" (Phase I) assessment, 2) a full (Phase II) environmental assessment, including sampling activities to identify the types and concentrations of contaminants and the areas of contamination to be cleaned; and 3) establishment of cleanup options and cost estimates based on future uses and redevelopment plans.

### 319 Nonpoint Source Grants

Colorado annually funds 18-22 projects statewide to implement their NPS management program. These projects compete for approximately \$2 million annually. Within the context of the management program, priority project categories are identified, such as: NPS activities in CWA 303(d) listed waters, information/education, watershed planning, agriculture, and stormwater management for non-permitted activities. Grants require a cost-share match. No more than 60 percent of the project's cost can be from federal funds (including Section 319 dollars or any other federal funds). The 40 percent costshare can come from individuals,

organizations, local governments, or state agencies. In-kind donations can also be used for the match; this might involve the use of equipment or space, a donation of time or services, or other support. Volunteer services can also provide part of the match. No more than 10 percent of a 319 grant can be used for administrative costs. Administrative costs include salaries, overhead, or other indirect costs. management program.

### **EPA Consolidated Funding Process**

The Region 8 Consolidated Funding Process (CFP) funds work identified under Section 104(b)(3) of the Clean Water Act which authorizes the award of grants for applied research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction and elimination of (water) pollution" to support the restoration of impacted watersheds, protection of pristine or high value watersheds or ecosystems, and water quality improvement. In the FY2003 CFP funding cycle, EPA Region 8 funded 57 projects out of 145 for a total of \$2,942,000.

#### **SUMMARY**

The mining legacy in the Lefthand Watershed has left the local communities with environmental issues that EPA, CDPHE, BCHD and LWOG are working to address in a collaborative process that encourages efficient, cost – effective and workable solutions. The goal of this watershed process is to assess the sources that need to be cleaned up and to meet state water quality standards that protect human health and the aquatic environment.

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